Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

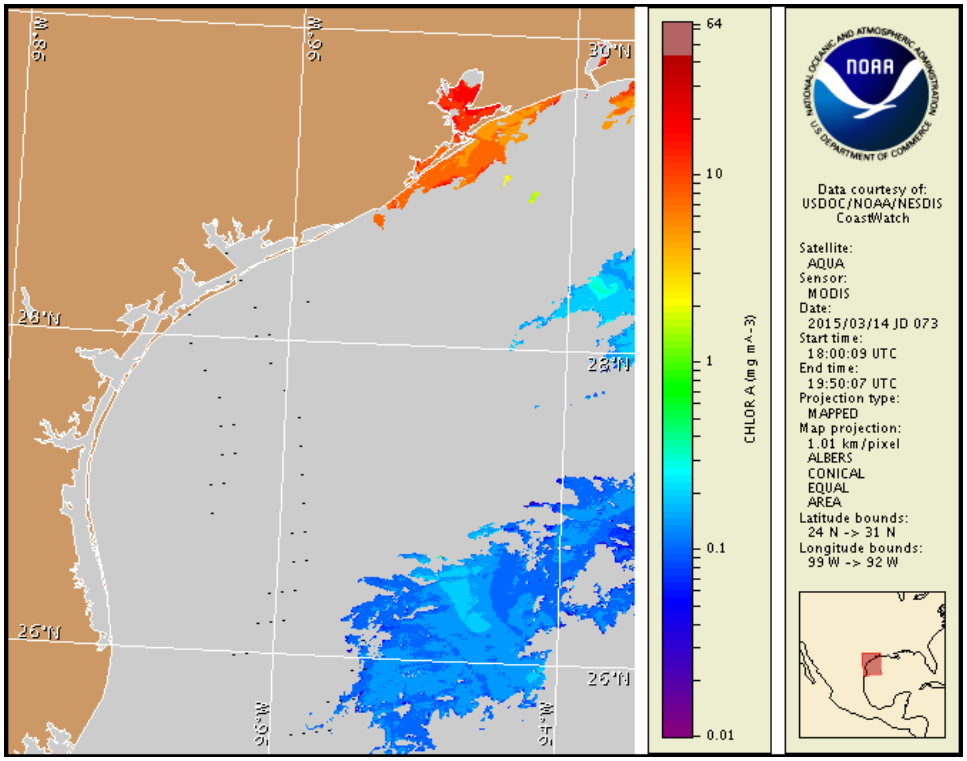
Monday, 16 March 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 9, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from March 6 to 12: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

http://www.tpwd.state.tx.us./landwater/water/environconcerns/hab/redtide/status.phtml

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To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Karenia brevis (commonly known as Texas red tide) ranges from not present to very low concentrations along the coast of Texas. No respiratory irritation is expected alongshore Texas Monday, March 16 through Monday, March 23.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

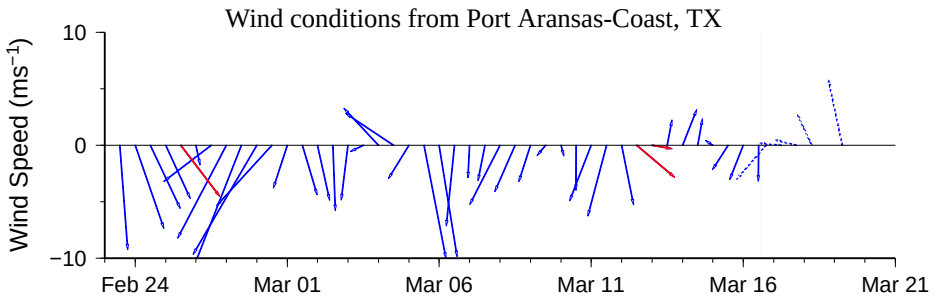
Analysis

Sampling from Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, continues to indicate that *Karenia brevis* concentrations range between 'not present' and 'very low a' (TAMU; 3/9-3/16). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Over the past week, MODIS Aqua imagery has been obscured by clouds from Sabine Pass to the Rio Grande, limiting analysis. In MODIS Aqua imagery from 3/12 (not shown) patches of elevated chlorophyll (3-4 μg/L) are visible stretching along- and offshore from Aransas Pass to the Rio Grande. In MODIS Aqua imagery from 3/14 (shown left) patches of elevated chlorophyll (4-10 μg/L) are visible along- and offshore the Bolivar Peninsula and Galveston Island regions.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 30km north from the Port Aransas region from March 14-19.

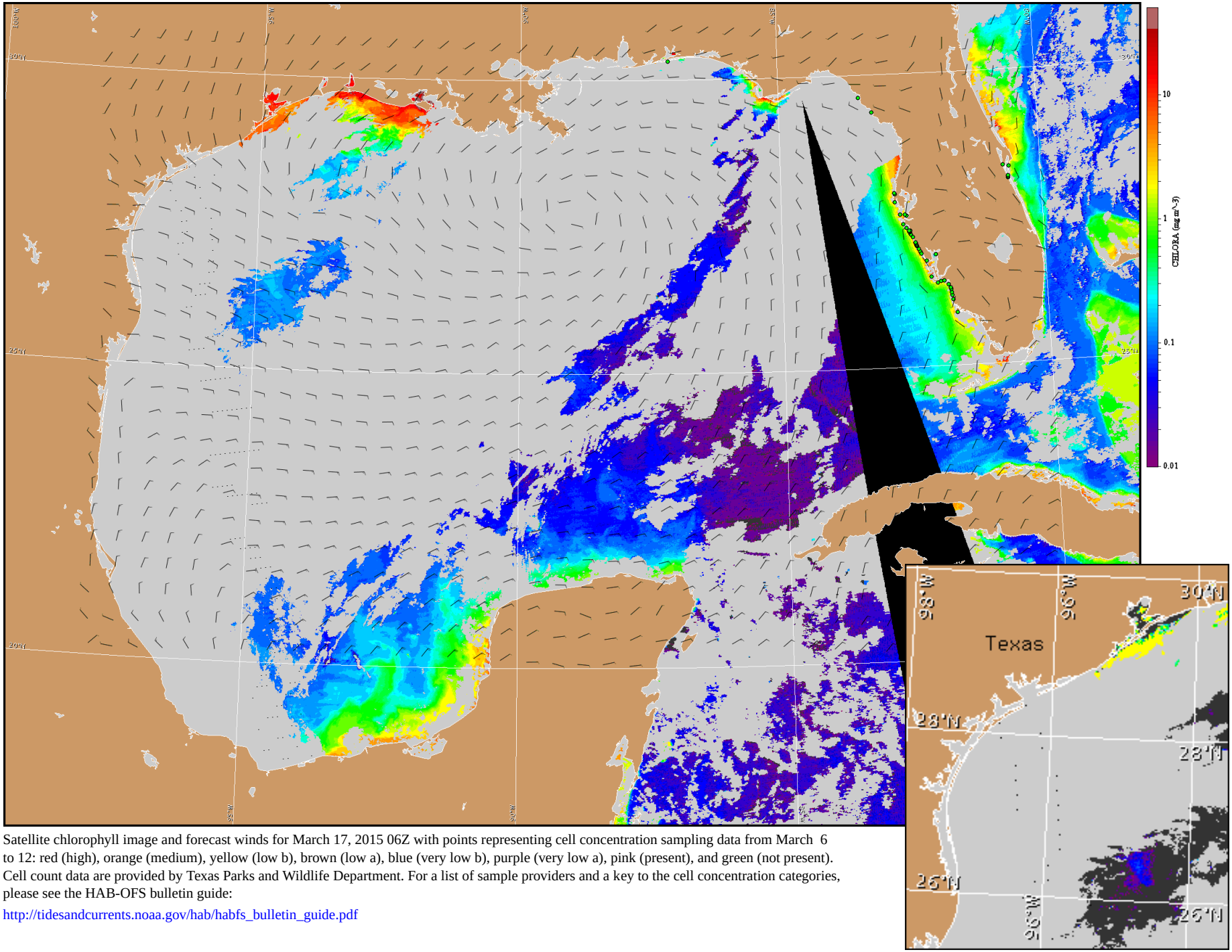
Davis, Derner



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Port Aransas: Northeast winds (10-15kn, 5-8m/s) today becoming east winds (5-10kn, 3-5m/s) tonight. Southeast winds (5-10kn) Tuesday through Thursday. East winds (5-10kn) Friday becoming northeast winds (5-15kn, 3-8m/s) in the evening.



Satellite chlorophyll image and forecast winds for March 17, 2015 06Z with points representing cell concentration sampling data from March 6 to 12: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).